

IN THE CLAIMS:

1. (cancelled)
2. (currently amended) A diffusion cell comprising a receptor and donor compartment, wherein the receptor compartment is a single-chambered compartment that includes a first outlet and a second outlet, a diffusion membrane and the donor compartment are positioned over the first outlet, and the second outlet forms a bubble trap and a sampling arm, wherein a bottom surface of the diffusion membrane forms at least a portion of the top surface of the receptor compartment and the first outlet of the receptor chamber is formed such that the portion of the top surface of the receptor compartment formed by the bottom surface of the diffusion membrane inclines upward toward the second outlet.
3. (cancelled).
4. (cancelled).
5. (cancelled).
6. (currently amended) The diffusion cell of claim 5~~2~~, wherein the first outlet and the second outlet are formed at the top surface of the receptor compartment and a bubble channel extends between the first and second outlet.
7. (currently amended) ~~The diffusion cell of claim 2~~A diffusion cell comprising a receptor and donor compartment, wherein the receptor compartment is a single-chambered compartment that includes a first outlet and a second outlet, a diffusion membrane and the donor compartment are positioned over the first outlet, and the second outlet forms a bubble trap and a sampling arm, wherein the receptor compartment includes a top surface, the first outlet and the second outlet are formed in the top surface, and a bubble channel extends between the first and second outlet.

8. (currently amended) The diffusion cell of claim ~~1-or 27~~, wherein the diffusion cell is formed of a top section and a bottom section and the top and bottom sections are separable.
9. (previously presented) The diffusion cell of claim 8, wherein the top section of the diffusion cell comprises the first outlet of the receptor compartment.
10. (previously presented) The diffusion cell of claim 9, wherein the top section of the diffusion cell comprises the first outlet and the second outlet of the receptor compartment.
11. (new) The diffusion cell of claim 2, wherein the diffusion cell is formed of a top section and a bottom section and the top and bottom sections are separable.
12. (new) The diffusion cell of claim 11, wherein the top section of the diffusion cell comprises the first outlet of the receptor compartment.
13. (new) The diffusion cell of claim 12, wherein the top section of the diffusion cell comprises the first outlet and the second outlet of the receptor compartment.
14. (new) A diffusion cell comprising
- a receptor compartment, which is a single-chambered compartment that includes a first outlet and a second outlet;
 - a diffusion membrane and a donor compartment, which are positioned over the first outlet; and
 - means for removing bubbles extending between the first and the second outlets.

15. (new) The diffusion cell of claim 14, wherein the means for removing bubbles comprises a channel.
16. (new) The diffusion cell of claim 14, wherein the means for removing bubbles comprises an incline facing upward toward the second outlet.
17. (new) The diffusion cell of claim 14, wherein the receptor compartment has a top surface and wherein the first outlet and the second outlet are located on the top surface.
18. (new) The diffusion cell of claim 17, wherein the means for removing bubbles comprises a channel.
19. (new) The diffusion cell of claim 17, wherein the means for removing bubbles comprises an incline upward toward the second outlet.